

Claim 1 stands rejected under 35 U.S.C. § 102(b) as anticipated by Arai (Japanese Patent Publication No. 3-264767).

Claim 1 recites a fuel injection valve comprising "a plurality of first nozzle holes formed in the fuel jet adjusting plate and arranged along a first circle coaxial with a central axis of the valve body" in combination with "a plurality of second nozzle holes formed in the fuel jet adjusting plate and arranged along a second circle coaxial with the central axis wherein a diameter of the second circle is larger than a diameter of the first circle, the second nozzle holes having an opening area smaller than an opening area of the first nozzle holes and *wherein the valve body is arranged so that, when the valve body assumes the open position, fuel flows across the first and second circles of the fuel jet adjusting plate from a radially outer area toward the central axis.*"

In contrast, Arai shows a fuel injector valve in which a central opening of a valve body has a diameter smaller than that of the second nozzle holes. That is, the radially outermost area from which fuel can be fed to the fuel jet adjusting plate of Arai, is radially inside the second holes 21B. (See, Figs. 1 and 2). Therefore, fuel can flow to the second nozzle holes only in a direction *radially away from the central axis*. This is in direct conflict with the recitation of claim 1.

It is therefore respectfully submitted that Arai neither illustrates nor describes fuel injector valve

comprising "a plurality of first nozzle holes formed in the fuel jet adjusting plate and arranged along a first circle coaxial with a central axis of the valve body" in combination with "a plurality of second nozzle holes formed in the fuel jet adjusting plate and arranged along a second circle coaxial with the central axis wherein a diameter of the second circle is larger than a diameter of the first circle, the second nozzle holes having an opening area smaller than an opening area of the first nozzle holes and wherein the valve body is arranged so that, when the valve body assumes the open position, fuel flows across the first and second circles of the fuel jet adjusting plate from a radially outer area toward the central axis," as recited in claim 1 and that claim 1 is not anticipated by Arai.

Claims 1 - 3 stand rejected under 35 U.S.C. § 103 as obvious over Harper (U.S. Patent No. 2,382,151) in view of Tani (U.S. Patent No. 5,762,272). The Examiner stated, in support of the rejection, that Harper shows the invention substantially as claimed except for the recitation that the openings are formed in a plate and the recitation of a driving device, but that Tani shows these elements.

As indicated in regard to Arai, it is respectfully submitted that neither Harper nor Tani shows flow across a fuel jet adjusting plate from outside a second circle on which second nozzle holes are formed radially inward toward a first circle on which first nozzle holes are formed. In fact, as shown in Fig. 2, the smaller diameter holes of Harper are located at the radially outermost portion of the chamber 25 and, therefore, fuel can not flow from a radially

outer position inward toward a central axis to reach these smaller diameter holes. Furthermore, as Tani includes no second holes, it is respectfully submitted that this reference also provides absolutely no such suggestion.

It is therefore respectfully submitted that neither Harper nor Tani either shows or suggests a fuel injection valve comprising "a plurality of first nozzle holes formed in the fuel jet adjusting plate and arranged along a first circle coaxial with a central axis of the valve body" in combination with "a plurality of second nozzle holes formed in the fuel jet adjusting plate and arranged along a second circle coaxial with the central axis wherein a diameter of the second circle is larger than a diameter of the first circle, the second nozzle holes having an opening area smaller than an opening area of the first nozzle holes and *wherein the valve body is arranged so that, when the valve body assumes the open position, fuel flows across the first and second circles of the fuel jet adjusting plate from a radially outer area toward the central axis,*" as recited in claim 1.

It is therefore respectfully submitted that claim 1 is not rendered obvious by Harper and Tani either taken alone or in combination.

Because claims 2 and 3 depend from and, therefore, include all of the limitations of claim 1, it is respectfully submitted that these claims are also allowable.

It is therefore respectfully submitted that all of

the presently pending claims are allowable. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

KENYON & KENYON

By: *Don Maguire*
(Reg. No. 44,172)

Dated: November 3, 1999

By: *Patrick J. Fay*
Patrick J. Fay
Reg. No. 35,508

One Broadway
New York, New York 10004
(212) 425 - 7200